

CONFIDENTIAL

Approved For Release 2000/08/29 : CIA-RDP79T01003A000900170001-3

29

CIA/RR CB 60-17

Copy No. _____
21 March 1960

CURRENT SUPPORT BRIEF

A GENERAL SURVEY OF COMMUNIST CHINA'S RAPID INDUSTRIALIZATION

OFFICE OF RESEARCH AND REPORTS

CENTRAL INTELLIGENCE AGENCY

This report represents the immediate views of the originating intelligence components of the Office of Research and Reports. Comments are solicited.

W - A - R - N - I - N - G

This document contains information affecting the national defense of the United States, within the meaning of the espionage laws, Title 18 USC, Sections 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

Approved For Release 2000/08/29 : CIA-RDP79T01003A000900170001-3

CONFIDENTIAL

A GENERAL SURVEY OF COMMUNIST CHINA'S RAPID INDUSTRIALIZATION

Since 1949 The Chinese Communist regime has dedicated itself to the achievement of world power through the rapid industrialization of its economy. The monopoly of political power possessed by Mao Tse-tung and his colleagues has enabled the regime to mobilize the manpower and natural resources of China for industrial development in a manner impossible for past Chinese governments. The Chinese Communists, using the USSR as a general model but also experimenting with new approaches and methods, have socialized China's economy and have initiated an extraordinarily ambitious program of industrial expansion. Communist China has made impressive progress in moving toward its goal of becoming a modern industrialized world power. The gross national product (GNP) of China has expanded at an average rate of about nine percent per year since 1952. Industrial production in the same period has expanded at a rate of about 20 percent, or more than double that of GNP. The very rapid expansion of production of steel, coal, and machine tools indicates the priority given to expansion of heavy industrial production (see chart, next page). For the period through 1967, the rate of growth of Chinese Communist industry, although declining, will still be at a high level. It is believed, for example, that the annual rate of growth of industrial production over the next decade will ultimately decline to about 10 percent, the present rate of growth of the USSR's industrial output.

The Period of Reconstruction (1949-52)

During the period of reconstruction (1949-52) the regime concentrated on stabilizing and restoring the badly disrupted economy of Communist China. The entire railroad system came under one management for the first time and was restored at least to its prewar level of performance. Production of cotton textiles in the centers of light industry on the East coast was restored. The regime began the restoration to production of the heavy industrial base established by the Japanese in Manchuria. In 1952, about 1,000,000 tons of steel were produced at Anshan; roughly 60,000,000 tons of coal were mined throughout China; and electric power output, centered primarily in Manchuria and around Shanghai, reached seven billion kilowatt hours. The Chinese Communists introduced an effective tax system, controls over movements of goods between rural and urban areas, and price controls in their efforts to stabilize business and to combat inflation. The state-owned enterprises inherited from the Chinese Nationalists formed the nucleus of a nationalized economy which was expanded rapidly throughout this and later periods.

The First Five Year Plan (1953-57)

The Chinese Communist First Five Year Plan (1953-57) was a period of building up capacity in heavy industry--steel, coal, cement, and basic machinery--and of using the industrial capacity already in existence far more intensively. Roughly two-thirds of the increase in industrial production during this period came from additions to capacity, and one-third was due to the greater utilization of industrial plants in existence before the plan was undertaken. During this period, production of crude steel increased from 1,300,000 tons in 1952 to 5,350,000 million tons in 1957. At Anshan, the heart of the iron and steel industry, output was tripled.

CONFIDENTIAL

ESTIMATED PRODUCTION OF MAJOR INDUSTRIAL COMMODITIES
IN COMMUNIST CHINA

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1962
Crude Steel	mil MT	1.35	1.77	2.22	2.85	4.46	5.35	8.0	13.3	25
Coal	mil MT	66.49	69.68	83.66	98.30	110.36	130.4	270.0	347.8	600
Petroleum	mil MT	0.44	0.62	0.79	0.97	1.16	1.46	2.26	3.70	6
Electric Power	bil KWH	7.26	9.3	11.0	12.3	16.6	19.3	27.5	41.5	100
Mchn Tools a/	1,000	13.7	20.5	15.9	13.7	25.9	28.3	50.0	70.0	N.A.
Trucks	1,000	0	0	0	0	1.6	7.5	16.0	19.4	N.A.
Tractors	1,000	0	0	0	0	0	0	0.96	4.87	N.A.
Cement	mil MT	2.9	3.9	4.6	4.5	6.4	6.9	9.3	12.3	20
Timber	mil cu mtr	11.2	14.2	16.0	20.5	20.6	27.9	35.7	41.2	N.A.
Paper (mchn made)	mil MT	0.37	0.43	0.55	0.59	0.74	0.92	1.23	1.70	2.80
Chem. Fert. b/	1,000 MT	39	53	71	85	132	158	257	400	1,200
Sulfuric Acid	1,000 MT	190	259	356	388	500	632	740	1,050	2,600
Cotton Cloth	bil linear meters	4.16	5.0	5.54	4.51	5.88	5.05	5.70	7.50	8.4
Cigarettes	mil cases	2.7	3.6	3.7	3.6	3.9	4.5	4.8	N.A.	N.A.
Salt	mil MT	4.9	3.6	4.9	7.5	4.2	8.3	10.4	11.4	15.0

a. A simple count of machine tools produced greatly overstates the Chinese Communist position with respect to the US, because of the lower average weight and complexity of Chinese machine tools.

b. Chemical nutrient equivalents based on amounts of nitrogen, phosphoric anhydride, and potassium oxide.

CONFIDENTIAL

CONFIDENTIAL

Machine building received top priority in investment, about one-fourth of all industrial investment going to increase capacity for production of machine tools, conventional military weapons, aircraft, ships, electronic equipment, trucks, freight cars and locomotives, and textile equipment. Most of the equipment to expand capacity came from the USSR and the European Satellites. The machine building industry, which previously had been oriented primarily toward repair, moved on to increasingly complex manufacturing.

The Trans-Mongolian Railway was completed, new lines were added in western China and Fukien, and the line extending northwest from Lanchow toward the Soviet border was begun. Expansion of coal production and electric power output was rapid but fell short of the growing needs of the economy. Considerable emphasis was placed on the building up of skilled manpower by attendance at technical schools, by on-the-job training, and by training in the USSR.

Light industry, which was relatively well developed in pre-Communist China, received a much lower share of investment resources than heavy industry. Investments were eight to one in favor of heavy industry during this period. Light industrial production was still subject to the fluctuation in the size of industrial crops. The chemical industry, a weak industry at the beginning of this period, received a relatively low priority in investment allocations until late 1956, and the absolute level of production in the chemical industry remained small even though the percentage increases in production were large.

The Second Five Year Plan (1958-62)

In the Second Five Year Plan (1958-62) the Chinese Communists are expanding productive capacity in the basic industries and widening the range and technological complexity of industrial production. In the first two years of the Second Plan, the program of expanding capacity in heavy industry has been continued on a crash basis. The expansion of iron and steel production has in certain ways been disproportionately large--compared with the expansion of machine building, for example. The Chinese Communists have emphasized the key commodity approach--steel, coal, grain, and cotton being the four most important commodities.

During the plan period, production of more complex industrial goods such as tractors, aircraft components, and naval vessels will be expanded. In machine tools China will turn out a wider variety of products, including a larger number of automatic and precision types. Nevertheless, the Chinese will remain deficient in production of heavy metalforming machinery for the duration of the plan. In the field of electronics the Chinese will shift from production of prototypes to mass production of relatively complex items. Soviet aid to China will reach its zenith during this period. The equivalent of about US \$300,000 in equipment and technical assistance for major industrial projects will be received on the average each year from the USSR. Several of the European Satellites will assist China in the construction of major industrial installations. This aid will be neither a gift nor a loan; the Chinese are operating on a pay-as-you-go basis. The Chinese are now, for the most part, taking over supervision of the new modern factories, the Soviet technicians now being relegated to a troubleshooting role. Training during this period will shift toward greater emphasis on development of higher skills, but mass training in literacy and simple industrial skills will continue.

CONFIDENTIAL

The Third Five Year Plan (1963-67)

The Chinese Communist Third Five Year Plan (1963-67) is expected to be a period of further reduction of dependence on outside sources for machinery and technical assistance, and of a change from emphasis on sheer output to emphasis on quality as well. During this period, China should become self-sufficient in basic industrial commodities, although industry will be oriented toward coal instead of oil as its principal source of energy. China will rank as the leading Asian industrial power on a crude aggregate basis. In terms of per capita output, Japan will remain ahead. Industrialization will begin to have a real impact on agriculture, which will receive increasing supplies of equipment and chemical fertilizers. Specifically, China will be able to produce machinery of standard types and sizes to equip new iron and steel plants and both thermal and hydroelectric power stations. China will be able to meet domestic requirements for ships, trucks, tractors, railroad rolling stock, electronic equipment of standard design, and essential military weapons (of a conventional type). By the end of this period, the technological gap between China and the USSR will still exist. China will remain dependent on the USSR, but this dependence will be considerably less than at present. By 1967, China's industrial output will be about one-quarter of the industrial output of the USSR.

Reasons for Rapid Industrial Growth

The past and present rapid industrial growth in Communist China has been possible for several reasons, as follows:

- (1) Under China's "command economy," there is an enforced will and a driving energy to succeed, which are demonstrated by vigorous implementation of economic plans, incredibly hard work by people at all levels, mass training to provide the necessary engineers and skilled workers, and a national pride in the success achieved.
- (2) A large and increasing proportion of the resources has been allocated to investment at the expense of consumption. At the present time, more than a quarter of the total output of China is being plowed back into the building of productive capacity.
- (3) Industrial equipment and processes have been supplied by the Soviet Bloc and constitute an effective cutting edge in China's rapid advance toward mastery of complex industrial techniques.
- (4) Finally, there are tremendous natural resources available, resources that are being exploited for the first time on a national scale.

The absolute size of Communist China's population has not been, nor should it become, a barrier to industrial progress. Rather, the barrier is the population increase, amounting to approximately 2.5 percent or 17,000,000 people per year, a rate not far below the estimated rate of growth in agriculture. The power of the central regime is possibly great enough to enforce a rigorous birth control program, but at present it professes to regard the increase in China's population as an economic asset. In any case, China's growing industrial strength will make the pressure of population on land a less serious threat in that increased domestic resources will be available for transfer to the agricultural sector and an increased volume of manufactured goods

will be available for export to southeast Asia in return for food. The level of per capita food consumption, however, will remain low by standards of other industrialized countries including the USSR.

25X1A

Analysts:

Coord :



21 March 1960

CIA/RR CB 60-17

Page 6

~~SECRET~~

5 May 1960

25X1A

MEMORANDUM FOR: Chief, [REDACTED]

SUBJECT : Request for Clearance of ORR Study
for Liaison Services

REFERENCE : [REDACTED]

25X1A

25X1C

1. The Office of Research and Reports interposes no objection to the release of the Current Support Brief, CIA/RR CB 60-17, A General Survey of Communist China's Rapid Industrialization, 21 March 1960. **CONFIDENTIAL**, [REDACTED]

25X1C

25X1C

[REDACTED] as requested in your memorandum of 20 April 1960, providing the following deletions are made:

Remove cover page;

Delete "CIA/RR CB 60-17" from pages 2, 3, 4, 5, and 6;

Delete analysts names, page 6.

2. Please note that this Current Support Brief has been upgraded to **CONFIDENTIAL** by memorandum of 29 March 1960. It was originally disseminated as "For Official Use Only."

FOR THE ASSISTANT DIRECTOR, RESEARCH AND REPORTS:

25X1A

[REDACTED]
Chief, Publications Staff
Office of Research and Reports

25X1A

St/P/C: [REDACTED] x-8622(5 May 1960)

Distribution:

- O & 1 - Addressee
- 2 - OAD/RR (w/cc of request)
- 1 - DD/AB/OCR (w/thermo of request)
- 1 - St/I/R (w/thermo of request)
- 2 - St/P/C
- 1 - Chrono

~~C-O-N-F-I-D-E-N-T-I-A-L~~

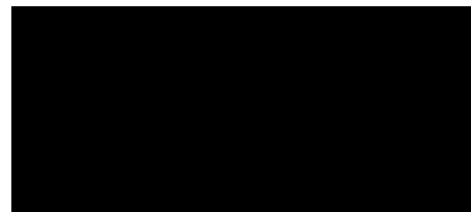
29 March 1960

TO: Holders of Concerned Current Support Brief
FROM: Chief, Current Support Staff, ORR
SUBJECT: Correction in Current Support Brief
Classification

Please upgrade the classification of CSB 60-17
to CONFIDENTIAL. It is presently classified OFFICIAL
USE ONLY.

Title	Date
A GENERAL SURVEY OF COMMUNIST CHINA'S RAPID INDUSTRIALIZATION	21 March 1960

25X1A



25X1A

RR/SC/CS:

11/4555(29 March 60)

141 - rail war College (via S/P/C)
25 - S/P/C (V.M.)
~~24 - S/P/C (CSC/IR) returned~~

~~C-O-N-F-I-D-E-N-T-I-A-L~~

Please return to ST/CS

TO: Chief, Dissemination Branch, Support Staff, OCI
Approved For Release 2000/08/29 : CIA-RDP79T01003A000900170001-3

FROM: Chief, Current Support Staff, ORR

SUBJECT: Distribution of Current Support ~~Memorandum~~ **Brief** No. 60-17
A GENERAL SURVEY OF COMMUNIST CHINA'S RAPID

INDUSTRIALIZATION

(Title)

21 March 1960

(Date)

Please distribute the attached Current Support ~~Memorandum~~ **Brief** No. 60-17 as follows:

Copy No.	Recipient	Copy No.	Recipient
1	DD/I)		
2-3	NIC)		
4-11	OCI Internal)		
12-18	NSA, [redacted] 25X1A		D-I-S-T-R-I-B-U-T-E-D B-Y O-C-I
19-25	St/CS/ORR)		

26	AD/ORR	74	Ch/D/S/ORR
27	DAD/ORR	75	S/TD/ORR
28	Ch/E/ORR	76	S/TF/ORR
29-46	St/PB/C/ORR	77	S/TF-SP/ORR
47	St/PR/ORR		(via S/TF/ORR)
48	Ch/D/A/ORR	78	S/TR/ORR
49-50	A/U/ORR	79	S/COM/ORR
51	A/F/ORR	80	S/CST/ORR
52	A/E/ORR	81-82	D/GG/ORR
53	A/PC/ORR	83	D/GG/N/ORR 25X1A
54	Ch/D/M/ORR		[redacted]
55	M/AG/ORR		
56	M/CH/ORR	84-88	Ch/St/I/ORR
57	M/FM/ORR	89	St/I/R/ORR
58	M/NF/ORR	90-91	St/I/P/ORR
59-61	M/FP/ORR	92	EIC/S/ORR
62-63	Ch/D/I/ORR	93	CCS/PIC 25X1A
64-67	I/GM/ORR		Attn. [redacted]
68	I/ME/ORR		514 Steuart Bldg.
69	I/MS/ORR	94	EE/ONE
70	I/PE/ORR	95	NED/OSI
71	I/AR/ORR	96	IPS/CSS/OSI
72	I/SH/ORR	97	XXXXXX 25X1A
73	I/EE/ORR	98	OISD

*22- St/PIK
15 June 60*

Additional Distribution: 25X1A
~~XXXXXXXXXXXXXXXXXXXX~~
121 - 150 - St/CS - extra

101-140 - A/F - [redacted]
142 - OCN/IR

Distributed: 24 MAR 1960 (Date)
25X1A [signature] (Initials)

25X1A 99 - A/F - [redacted] 2709 L Bldg.
(Analyst/Branch) 25X1A
(Analyst/Branch)

145-148 - St/PIK - [redacted]

25X1A [redacted] Chief, Current Support Staff

SECRET

Please return to ST/CS

Approved For Release 2000/08/29 : CIA-RDP79T01003A000900170001-3

21 March 1960

(Date)

TO: Chief, Dissemination Branch, Support Staff, OCI

FROM: Chief, Current Support Staff, ORR

SUBJECT: Distribution of Current Support Memorandum No. **60-17****A GENERAL SURVEY OF COMMUNIST CHINA'S RAPID
INDUSTRIALIZATION****21 March 1960**

(Date)

(Title)

Please distribute the attached Current Support Memorandum No. **60-17**
as follows:Copy No.Recipient

1


19-F.P. DD/I

2-3

NIC

25X1A

4

20-J.H. AD/OCI (via )

5

CA/SSB/OCI

6

PRES/OCI

7

CS/ECON/OCI

8

NSAL

9

INDICO/OCI

10

/OCI

11

/OCI

25X1A

12-18

Director NSA
Washington 25, D. C.
Attention: 

19-25


St/CS/ORR

26-

Chief, St/I/D/ORR
1338 M Building

25X1A

25X1A


Chief, Current Support StaffDistributed: *23 March '60*

(Date)

ESMT
(Initials)

Approved For Release 2000/08/29 : CIA-RDP79T01003A000900170001-3

PR/St/CS:

11/4555(29 July 59)

ROUTING AND RECORD SHEET

SUBJECT: (Optional)

CSN DRAFT:

FROM:

NO.

DATE

TO: (Officer designation, room number, and building)

DATE

RECEIVED

FORWARDED

OFFICER'S INITIALS

COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)

1.	Monitor				STATINTL STATINTL STATINTL STATINTL
	[redacted]				
	Typ/st				
	[redacted]	17 Mar	18 Mar 60	JB	
3.	Proofers			JB	
	[redacted]			BA.	
4.	Monitor				
		18 Mar	JH	18 Mar 60	
5.	Author				
		18 MAR	18 MAR	AGA	
6.	Ch/St/CS				
			21 Mar	JD	
7.	Ch/ERA				
			21 Mar	ETA	
8.	Ch/St/CS				
9.	OCI Printers				
	Out. JB	18 M	18 Mar		
10.		JB	60	JB	
11.					
12.					
13.					
14.					
15.					

CS# No. 60-17

Date 21 Mar 60

29 File copy

30

31

32

33

34

35

36

37

38

39

40

145-148

41

42

43

44

45

145-148 from ST/CS, 2 Apr 60

46 Re: id to CSS

sent: 30 Mar 60

19 Records Center 10 Sep 64

STATINTL